AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application including any Article 19 or 34 Amendments:

LISTING OF CLAIMS:

1. (original) Process for the production of an active molecule vector that can be applied in the biomedical field, characterized in that it comprises the following stages:

- Diluting a monomer that has at least two NH_2 groups that are separated by at least four carbons in water,
- Adjusting the pH to a value of between 6.5 and 7.5,
- Adding glutaraldehyde, $OHC-(CH_2)_3-COH$, and
- Awaiting the polycondensation reaction and the formation of imines, and
- Recovering the poly(monomer-G) that is obtained.

2. (currently amended) Process for the production of an active molecule vector that can be applied in the biomedical field of claim 1, wherein the monomer is the L-ornithine, the L-lysine or the L-citrulline to obtain the

formation of poly(L-ornithine-G), poly(L-lysine-G), or poly(L-citrulline-G).

3. (currently amended) Process for the production of a molecule vector that can be applied in the biomedical field according to claim 1 [[or 2]], wherein the polymer that is obtained is linear.

4. (currently amended) Process for the production of a molecule vector that can be applied in the biomedical field according to claim 1 [[or 2]], wherein a cross-linking agent is added to obtain a 3D network of poly(L-ornithine-G), poly(L-lysine-G), and poly(L-citrulline-G).

5. (original) Process for the production of a molecule vector that can be applied in the biomedical field according to claim 4, wherein the cross-linking agent is polyethylenimine.

6. (currently amended) Process for the production of a molecule vector that can be applied in the biomedical field according to claim 4 [[or 5]], wherein the homopolymer that is obtained is dispersed into a hydrophobic organic medium to obtain a two-phase effect to produce beads of poly(L-ornithine-G), poly(L-lysine-G) or poly(L-citrulline-G).

7. (original) Process for the production of a molecule vector that can be applied in the biomedical field according to claim 6, wherein to collect the thus formed beads, they are mechanically held on a filter and then dried under a stream of hot air.

8. (currently amended) Process for the production of a molecule vector that can be applied in the biomedical field according to claim 6 [[or 7]], wherein heating of the hydrophobic organic medium that is used is initiated.

9. (currently amended) Process for the production of a molecule vector that can be used in water treatment according to ~~any of the preceding claims~~ claim 1, wherein to reduce the double bonds of the imines and to obtain amines, the following operations are initiated:

- Degreasing of the polymer that is obtained resulting from the condensation reaction,
- Treatment at least once with soda, and
- Bringing this polymer into the presence of sodium borohydride.

10. (currently amended) Molecule vector that can be applied in the biomedical field, wherein [[it]] the molecule

comprises the poly(ornithine-G), the poly(L-lysine-G) or the poly(L-citrulline-G) to which are grafted active molecules such as fatty acids, antioxidants, vitamin-enriched compounds, hormones, medications or neurotransmitters for having bacteriostatic, anti-allergenic, anti-parasitic, anti-predatory, antifungal, anti-inflammatory or immunomodulating activities.

11. (currently amended) ~~Use of the vector of claim 10, obtained according to the process of any one of claims 1 to 9, wherein it is used to receive~~ A method of receiving at least one of fatty acids, antioxidants, vitamin-enriched compounds [[or]] and neurotransmitters for having bacteriostatic, anti-allergenic, anti-parasitic, anti-predatory, antifungal, anti-inflammatory or immunomodulating activities, the method comprising applying an effective amount of a molecule vector comprising at least one of the poly(ornithine-G), the poly(L-lysine-G) and the poly(L-citrulline-G) to which are grafted active molecules selected from a group consisting of fatty acids, antioxidants, vitamin-enriched compounds, hormones, medications and neurotransmitters.

12. (new) Process for the production of a molecule vector that can be applied in the biomedical field

according to claim 2, wherein the polymer that is obtained is linear.

13. (new) Process for the production of a molecule vector that can be applied in the biomedical field according to claim 2, wherein a cross-linking agent is added to obtain a 3D network of poly(L-ornithine-G), poly(L-lysine-G), and poly(L-citrulline-G).

14. (currently amended) Process for the production of a molecule vector that can be applied in the biomedical field according to claim 5, wherein the homopolymer that is obtained is dispersed into a hydrophobic organic medium to obtain a two-phase effect to produce beads of poly(L-ornithine-G), poly(L-lysine-G) or poly(L-citrulline-G).

15. (new) Process for the production of a molecule vector that can be applied in the biomedical field according to claim 7, wherein heating of the hydrophobic organic medium that is used is initiated.

16. (new) Process for the production of a molecule vector that can be used in water treatment according to claim 2, wherein to reduce the double bonds of the imines and to obtain amines, the following operations are initiated:

- Degreasing of the polymer that is obtained resulting from the condensation reaction,
- Treatment at least once with soda, and
- Bringing this polymer into the presence of sodium borohydride.

17. (new) Process for the production of a molecule vector that can be used in water treatment according to claim 3, wherein to reduce the double bonds of the imines and to obtain amines, the following operations are initiated:

- Degreasing of the polymer that is obtained resulting from the condensation reaction,
- Treatment at least once with soda, and
- Bringing this polymer into the presence of sodium borohydride.

18. (new) Process for the production of a molecule vector that can be used in water treatment according to claim 4, wherein to reduce the double bonds of the imines and to obtain amines, the following operations are initiated:

- Degreasing of the polymer that is obtained resulting from the condensation reaction,
- Treatment at least once with soda, and

- Bringing this polymer into the presence of sodium borohydride.

19. (new) Process for the production of a molecule vector that can be used in water treatment according to claim 5, wherein to reduce the double bonds of the imines and to obtain amines, the following operations are initiated:

- Degreasing of the polymer that is obtained resulting from the condensation reaction,
- Treatment at least once with soda, and
- Bringing this polymer into the presence of sodium borohydride.

20. (new) Process for the production of a molecule vector that can be used in water treatment according to claim 6, wherein to reduce the double bonds of the imines and to obtain amines, the following operations are initiated:

- Degreasing of the polymer that is obtained resulting from the condensation reaction,
- Treatment at least once with soda, and
- Bringing this polymer into the presence of sodium borohydride.